# CITY OF SUNRISE POLICE OFFICERS' RETIREMENT SYSTEM

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2016 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ending September 30, 2016





August 9, 2017

Board of Trustees City of Sunrise Police Officers' Retirement System Sunrise, Florida

Dear Board Members:

Gabriel, Roeder, Smith & Company (GRS) has been engaged by the City of Sunrise Police Officers' Retirement System (Plan) to prepare a disclosure report to satisfy the requirements set forth in Ch. 112.664, F.S. and as further required pursuant to Ch. 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Ch. 112.664, F.S. as well as supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

The findings in this report are based on data or other information through September 30, 2016. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the City and Plan Administrator concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City and Plan Administrator.

Except as otherwise indicated as required for the disclosures contained herein, this report was prepared using certain assumptions selected by the Board as described in our October 1, 2016 actuarial valuation report. This report is also based on the Plan Provisions, census data, and financial information as summarized in our October 1, 2016 actuarial valuation report. Please refer to the October 1, 2016 actuarial valuation report, dated June 29, 2017, for summaries and descriptions of this information.

The use of an investment return assumption that is 2% higher than the investment return assumption used to determine the funding requirements does not represent an estimate of future Plan experience nor does it reflect an observation of future return estimates inherent in financial market data. The use of this investment return assumption is provided as a counterpart to the Chapter 112.664, Florida Statutes requirement to utilize an investment return assumption that is 2% lower than the assumption used to determine the funding requirements. The inclusion of the additional exhibits showing the effect of using a 2% higher investment return assumption shows a more complete assessment of the range of possible results as opposed to showing a one-sided range as required by Florida Statutes.

Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1) F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664(1), F.S. and Section 60T-1.0035, F.A.C.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

Jeffrey Amrose, MAAA

Enrolled Actuary No. 17-6599

Senior Consultant & Actuary

Trisha Amrose, MAAA

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# CH. 112.664, Florida Statutes RESULTS

### Schedule of Changes in the Employers' Net Pension Liability Using Financial Reporting Assumptions per GASB Statement No. 67

Fiscal year ending September 30,	2016	
1. Total pension liability		
a. Service Cost	\$	4,415,243
b. Interest		13,727,142
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		560,558
e. Assumption Changes		-
f. Benefit Payments		(8,399,112)
g. Contribution Refunds		(65,487)
h. Net Change in Total Pension Liability		10,238,344
i. Total Pension Liability - Beginning		175,806,062
j. Total Pension Liability - Ending	\$	186,044,406
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,834,348
b. Contributions - Employer (from State)	•	693,248
c. Contributions - Member		1,510,667
d. Net Investment Income		10,187,217
e. Benefit Payments		(8,399,112)
f. Contribution Refunds		(65,487)
g. Administrative Expense		(338,086)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		12,422,795
j. Plan Fiduciary Net Position - Beginning		110,239,064
k. Plan Fiduciary Net Position - Ending	\$	122,661,859
3. Net Pension Liability / (Asset)		63,382,547
Certain Key Assumptions		
Valuation Date		10/01/2015
Measurement Date		09/30/2016
Investment Return Assumption		7.80%
Mortality Table	RP-2000 f	ully generational
		using Scale AA



### Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(a), F.S.

iscal year ending September 30, 2016		2016
1. Total pension liability		
a. Service Cost	\$	4,415,243
b. Interest		13,727,142
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		560,558
e. Assumption Changes		-
f. Benefit Payments		(8,399,112)
g. Contribution Refunds		(65,487)
h. Net Change in Total Pension Liability		10,238,344
i. Total Pension Liability - Beginning		175,806,062
j. Total Pension Liability - Ending	\$	186,044,406
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,834,348
b. Contributions - Employer (from State)		693,248
c. Contributions - Member		1,510,667
d. Net Investment Income		10,187,217
e. Benefit Payments		(8,399,112)
f. Contribution Refunds		(65,487)
g. Administrative Expense		(338,086)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		12,422,795
j. Plan Fiduciary Net Position - Beginning		110,239,064
k. Plan Fiduciary Net Position - Ending	\$	122,661,859
3. Net Pension Liability / (Asset)		63,382,547
Certain Key Assumptions		
Valuation Date		10/01/2015
Measurement Date		09/30/2016
Investment Return Assumption		7.80%
Mortality Table	RP-2000 f	ully generational
		using Scale AA



### Schedule of Changes in the Employers' Net Pension Liability Using Assumptions required under 112.664(1)(b), F.S.

Fiscal year ending September 30,		2016	
1. Total pension liability			
a. Service Cost	\$	7,055,210	
b. Interest		13,425,870	
c. Benefit Changes		-	
d. Difference between actual & expected experience & Other		-	
e. Assumption Changes		-	
f. Benefit Payments		(8,399,112)	
g. Contribution Refunds		(65,487)	
h. Net Change in Total Pension Liability		12,016,481	
i. Total Pension Liability - Beginning		228,657,608	
j. Total Pension Liability - Ending	\$	240,674,089	
2. Plan Fiduciary Net Position			
a. Contributions - Employer	\$	8,834,348	
b. Contributions - Employer (from State)		693,248	
c. Contributions - Member		1,510,667	
d. Net Investment Income		10,187,217	
e. Benefit Payments		(8,399,112)	
f. Contribution Refunds		(65,487)	
g. Administrative Expense		(338,086)	
h. Other		<u> </u>	
i. Net Change in Plan Fiduciary Net Position		12,422,795	
j. Plan Fiduciary Net Position - Beginning		110,239,064	
k. Plan Fiduciary Net Position - Ending	\$	122,661,859	
3. Net Pension Liability / (Asset)		118,012,230	
Certain Key Assumptions			
Valuation Date		10/01/2015	
Measurement Date		09/30/2016	
Investment Return Assumption		5.80%	
Mortality Table	RP-2000 f	ully generational	
		using Scale AA	



### Schedule of Changes in the Employers' Net Pension Liability Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

Fiscal year ending September 30,	2016	
1. Total pension liability		_
a. Service Cost	\$	2,895,671
b. Interest		13,737,689
c. Benefit Changes		-
d. Difference between actual & expected experience & Other		-
e. Assumption Changes		-
f. Benefit Payments		(8,399,112)
g. Contribution Refunds		(65,487)
h. Net Change in Total Pension Liability	-	8,168,761
i. Total Pension Liability - Beginning		141,517,133
j. Total Pension Liability - Ending	\$	149,685,894
2. Plan Fiduciary Net Position		
a. Contributions - Employer	\$	8,834,348
b. Contributions - Employer (from State)	Ψ	693,248
c. Contributions - Member		1,510,667
d. Net Investment Income		10,187,217
e. Benefit Payments		(8,399,112)
f. Contribution Refunds		(65,487)
g. Administrative Expense		(338,086)
h. Other		-
i. Net Change in Plan Fiduciary Net Position		12,422,795
j. Plan Fiduciary Net Position - Beginning		110,239,064
k. Plan Fiduciary Net Position - Ending	\$	122,661,859
3. Net Pension Liability / (Asset)		27,024,035
Certain Key Assumptions		
Valuation Date		10/01/2015
Measurement Date		09/30/2016
Investment Return Assumption		9.80%
Mortality Table	RP-2000 f	ully generational
		using Scale AA



## Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions per the Plan's latest Actuarial Valuation

	Market Value of	Expected Investment	Projected Benefit	Market Value of
FYE	Assets (BOY)	Return	Payments	Assets (EOY)
2017	114,736,522	8,582,722	7,983,433	115,335,811
2018	115,335,811	8,598,932	8,763,702	115,171,041
2019	115,171,041	8,565,515	9,296,528	114,440,029
2020	114,440,029	8,476,442	10,133,179	112,783,291
2021	112,783,291	8,315,879	10,963,254	110,135,916
2022	110,135,916	8,086,053	11,599,503	106,622,466
2023	106,622,466	7,789,383	12,228,593	102,183,256
2024	102,183,256	7,429,412	12,639,749	96,972,919
2025	96,972,919	7,008,384	13,084,312	90,896,991
2026	90,896,991	6,519,810	13,540,826	83,875,975
2027	83,875,975	5,964,194	13,837,269	76,002,900
2028	76,002,900	5,344,075	14,094,180	67,252,795
2029	67,252,795	4,654,511	14,389,179	57,518,127
2030	57,518,127	3,891,597	14,607,956	46,801,768
2031	46,801,768	3,053,684	14,798,785	35,056,667
2032	35,056,667	2,135,690	14,998,742	22,193,615
2033	22,193,615	1,132,993	15,148,710	8,177,898
2034	8,177,898	39,369	15,339,818	-
2035	-	-	15,504,951	-
2036	-	-	15,645,182	-
2037	-	-	15,770,618	-
2038	-	-	15,880,308	-
2039	-	-	15,957,169	-
2040	-	-	16,038,696	-
2041	-	-	16,096,929	-
2042	-	-	16,141,600	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

17.50

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

7.75%

FRS Mortality Rates from 7/1/16 FRS Valuation



## Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(a), F.S.

	Market Value of	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	Return	Payments	Assets (EOY)
2017	114,736,522	8,582,722	7,983,433	115,335,811
2018	115,335,811	8,598,932	8,763,702	115,171,041
2019	115,171,041	8,565,515	9,296,528	114,440,029
2020	114,440,029	8,476,442	10,133,179	112,783,291
2021	112,783,291	8,315,879	10,963,254	110,135,916
2022	110,135,916	8,086,053	11,599,503	106,622,466
2023	106,622,466	7,789,383	12,228,593	102,183,256
2024	102,183,256	7,429,412	12,639,749	96,972,919
2025	96,972,919	7,008,384	13,084,312	90,896,991
2026	90,896,991	6,519,810	13,540,826	83,875,975
2027	83,875,975	5,964,194	13,837,269	76,002,900
2028	76,002,900	5,344,075	14,094,180	67,252,795
2029	67,252,795	4,654,511	14,389,179	57,518,127
2030	57,518,127	3,891,597	14,607,956	46,801,768
2031	46,801,768	3,053,684	14,798,785	35,056,667
2032	35,056,667	2,135,690	14,998,742	22,193,615
2033	22,193,615	1,132,993	15,148,710	8,177,898
2034	8,177,898	39,369	15,339,818	-
2035	-	-	15,504,951	-
2036	-	-	15,645,182	-
2037	-	-	15,770,618	-
2038	-	-	15,880,308	-
2039	-	-	15,957,169	-
2040	-	-	16,038,696	-
2041	-	-	16,096,929	-
2042	-	-	16,141,600	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from the Employer, Employee or State, contrary to Florida Statutes and Plan provisions</u>:

17.50

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

7.75% FRS Mortality Rates from 7/1/16 FRS Valuation



# Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions required under 112.664(1)(b), F.S.

	Market Value of	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	Return	Payments	Assets (EOY)
2017	114,736,522	6,367,826	7,983,433	113,120,915
2018	113,120,915	6,252,496	8,763,702	110,609,710
2019	110,609,710	6,092,783	9,296,528	107,405,965
2020	107,405,965	5,884,514	10,133,179	103,157,300
2021	103,157,300	5,616,351	10,963,254	97,810,397
2022	97,810,397	5,290,612	11,599,503	91,501,506
2023	91,501,506	4,909,765	12,228,593	84,182,678
2024	84,182,678	4,477,111	12,639,749	76,020,040
2025	76,020,040	3,994,978	13,084,312	66,930,706
2026	66,930,706	3,459,217	13,540,826	56,849,097
2027	56,849,097	2,871,002	13,837,269	45,882,829
2028	45,882,829	2,233,055	14,094,180	34,021,704
2029	34,021,704	1,542,559	14,389,179	21,175,085
2030	21,175,085	797,589	14,607,956	7,364,717
2031	7,364,717	-	14,798,785	-
2032	-	-	14,998,742	-
2033	-	-	15,148,710	-
2034	-	-	15,339,818	-
2035	-	-	15,504,951	-
2036	-	-	15,645,182	-
2037	-	-	15,770,618	-
2038	-	-	15,880,308	-
2039	-	-	15,957,169	-
2040	-	-	16,038,696	-
2041	-	-	16,096,929	-
2042	-	-	16,141,600	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from</u> the Employer, Employee or State, contrary to Florida Statutes and Plan provisions:

14.50

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

5.75%

FRS Mortality Rates from 7/1/16 FRS Valuation



# Asset and Benefit Payment Projection Not Reflecting Any Contributions from the Employer, State or Employee Using Assumptions under 112.664(1)(b), F.S. except 2% higher investment return assumption

	<b>Market Value of</b>	<b>Expected Investment</b>	<b>Projected Benefit</b>	Market Value of
FYE	Assets (BOY)	Return	Payments	Assets (EOY)
2017	114,736,522	10,797,619	7,983,433	117,550,708
2018	117,550,708	11,033,964	8,763,702	119,820,969
2019	119,820,969	11,229,339	9,296,528	121,753,780
2020	121,753,780	11,377,001	10,133,179	122,997,602
2021	122,997,602	11,457,808	10,963,254	123,492,155
2022	123,492,155	11,475,009	11,599,503	123,367,662
2023	123,367,662	11,432,203	12,228,593	122,571,272
2024	122,571,272	11,334,511	12,639,749	121,266,034
2025	121,266,034	11,185,578	13,084,312	119,367,300
2026	119,367,300	10,978,197	13,540,826	116,804,671
2027	116,804,671	10,713,889	13,837,269	113,681,290
2028	113,681,290	10,396,835	14,094,180	109,983,945
2029	109,983,945	10,021,962	14,389,179	105,616,728
2030	105,616,728	9,585,493	14,607,956	100,594,265
2031	100,594,265	9,086,500	14,798,785	94,881,980
2032	94,881,980	8,519,804	14,998,742	88,403,043
2033	88,403,043	7,880,797	15,148,710	81,135,130
2034	81,135,130	7,162,859	15,339,818	72,958,171
2035	72,958,171	6,357,555	15,504,951	63,810,775
2036	63,810,775	5,458,848	15,645,182	53,624,441
2037	53,624,441	4,459,565	15,770,618	42,313,388
2038	42,313,388	3,351,390	15,880,308	29,784,470
2039	29,784,470	2,126,074	15,957,169	15,953,375
2040	15,953,375	773,568	16,038,696	688,247
2041	688,247	-	16,096,929	-
2042	-	-	16,141,600	-

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits, <u>reflecting no contributions from</u>
<u>the Employer, Employee or State, contrary to Florida Statutes and Plan provisions:</u>

24.08

#### **Certain Key Assumptions**

Valuation Investment return assumption Valuation Mortality Table

9.75%

FRS Mortality Rates from 7/1/16 FRS Valuation



ACTUARIALLY DETERMINED CONTRIBUTION					
	Plan's Latest Actuarial Valuation Assumptions	112.664(1)(a) F.S. Assumptions	112.664(1)(b) F.S. Assumptions	112.664(1)(b) F.S. Except 2% Higher Investment Return Assumption	
A. Valuation Date	October 1, 2016	October 1, 2016	October 1, 2016	October 1, 2016	
B. Actuarially Determined Contribution (ADC) to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2018	9/30/2018	
C. Assumed Dates of Employer Contributions	Biweekly	Biweekly	Biweekly	Biweekly	
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 6,653,887	\$ 6,653,887	\$ 9,606,520	\$ 4,119,343	
E. Employer Normal Cost	3,271,107	3,271,107	6,019,015	1,704,172	
F. Employer ADC if Paid on Valuation Date: D+E	9,924,994	9,924,994	15,625,535	5,823,515	
G. Employer ADC Adjusted for Frequency of Payments	10,309,985	10,309,985	16,079,457	6,105,140	
H. Employer ADC Adjusted for Frequency of Payments as % of Covered Payroll	64.33 %	64.33 %	100.33 %	38.09 %	
Assumed Rate of Increase in Covered     Payroll to Contribution Year	3.00 %	3.00 %	3.00 %	3.00 %	
J. Covered Payroll for Contribution Year	16,507,970	16,507,970	16,507,970	16,507,970	
K. ADC for Contribution Year: H x J	10,619,577	10,619,577	16,562,446	6,287,886	
L. Allowable Credit for State Revenue in Contribution Year	693,248	693,248	693,248	693,248	
M. Net Employer ADC After State Revenue in Contribution Year	9,926,329	9,926,329	15,869,198	5,594,638	
N. Net Employer ADC as % of Covered Payroll in Contribution Year: M ÷ J	60.13 %	60.13 %	96.13 %	33.89 %	
O. Expected Member Contributions	1,615,566	1,615,566	1,615,566	1,615,566	
P. Total Contribution (including Members) in Contributing Year: K + O	12,235,143	12,235,143	18,178,012	7,903,452	
Q. Total Contribution as a % of covered payroll in Contribution Year: P ÷ J	74.12 %	74.12 %	110.12 %	47.88 %	
R. Certain Key Assumptions Investment Return Assumption Mortality Table	7.75% FRS Mortality Rates from 7/1/16 FRS Valuation	7.75% FRS Mortality Rates from 7/1/16 FRS Valuation	5.75% FRS Mortality Rates from 7/1/16 FRS Valuation	9.75% FRS Mortality Rates from 7/1/16 FRS Valuation	

